

**AMENDMENTS TO CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An image sensing apparatus comprising:
  - a plurality of pixels arrayed in a horizontal and a vertical direction;
  - a first calculating portion which creates one-dimensional correction data in the horizontal direction by performing computation using signals which are acquired by image sensing in an unexposed state and smaller in number than said plurality of pixels, and changes the number of signals used to create the one-dimensional correction data in horizontal direction in accordance with a sensitivity condition set at the time of image sensing; and
    - a second calculating portion which corrects image data of said plurality of pixels for image data of each array of pixels arrayed in the horizontal direction, acquired by image sensing in an exposed state, by using the one-dimensional correction data in the horizontal direction.
2. (Canceled)
3. (Previously Presented) The apparatus according to claim 1, wherein in that said plurality of pixels are arrayed in the horizontal direction and the vertical direction, and said first calculating portion creates the one-dimensional correction data in horizontal direction by vertically mixing signals from pixels which are smaller in number than said plurality of pixels and arrayed in the horizontal and the vertical direction.

4. (Previously Presented) The apparatus according to claim 3, further comprising an amplifier for each array of pixels arrayed in the vertical direction, wherein said first calculating portion creates the one-dimensional correction data in horizontal direction by vertically mixing signals from pixels, which are smaller in number than said plurality of pixels and arrayed in the horizontal direction and the vertical direction, through the corresponding amplifiers.

5. (Original) The apparatus according to claim 1, wherein said first calculating portion operates in accordance with ON operation of a power switch of the image sensing apparatus.

6. (Currently Amended) A control method for an image sensing apparatus having a plurality of pixels arrayed in a horizontal and a vertical direction, comprising:

a first calculating step which creates one-dimensional correction data in horizontal direction by performing computation using signals which are acquired by image sensing in an unexposed state and smaller in number than said plurality of pixels, and changes the number of signals used to create the one-dimensional correction data in horizontal direction in accordance with a sensitivity condition set at the time of image sensing; and

a second calculating step which corrects image data of said plurality of pixels for image data of each array of pixels arrayed in horizontal direction, acquired by image sensing in an exposed state, by using the one-dimensional correction data in horizontal direction.

7. (Canceled)

8. (Currently Amended) A computer readable medium storing program code which when executed by a computer implements a control method for an image sensing apparatus having a plurality of pixels arrayed in a horizontal and a vertical direction, the method comprising:

a first calculating step which creates one-dimensional correction data in horizontal direction by performing computation using signals which are acquired by image sensing in an unexposed state and smaller in number than said plurality of pixels, and changes the number of signals used to create the one-dimensional correction data in horizontal direction in accordance with a sensitivity condition set at the time of image sensing; and

a second calculating step which corrects image data of said plurality of pixels for image data of each array of pixels arrayed in horizontal direction, acquired by image sensing in an exposed state, by using the one-dimensional correction data in horizontal direction.

9. (Previously Presented) The apparatus according to claim 1, wherein only signals of a smaller number than said plurality of pixels to be corrected are acquired by image sensing in an unexposed state to create the one-dimensional correction data in horizontal direction.

10. (Canceled)

11. (Previously Presented) The apparatus according to claim 1, wherein the second calculating portion uses the one-dimensional correction data in horizontal direction to correct for noise in the image data in horizontal direction.